

Name: _____ Date: _____

Date: _____

u14 A Story of Special Right Triangles

1. The first special right triangle has a hypotenuse of length 1 and is isosceles. Draw a diagram, and label the sides, using a variable for the non-obvious lengths.
2. How large are the angles, from least to greatest, in the triangle you drew above? Answer in both degrees and radians.
3. Use the Pythagorean Theorem to find the unknown lengths. Please answer in exact (and simplified) form.

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- The second special right triangle is formed by splitting an equilateral triangle in half. The right triangle should have a hypotenuse of length 1. Draw the equilateral triangle with dashed lines; draw the right triangle with solid lines; label the side lengths of the right triangle, using a variable for the non-obvious length.
- How large are the angles, from least to greatest, of the right triangle? Answer in both degrees and radians.
- Use the Pythagorean Theorem to find the length of the unknown side. Please answer in exact (and simplified) form.